

Science and Technology Collaboration Tool

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1/03/97 11:49:21 AM

Background

- Business Process Reengineering (BPR) effort undertaken to streamline Science & Technology (S&T) document update process
- 300 S&T Planning Documents are updated annually
- Analysis showed the process was inefficient and time consuming



BPR Results

- Several COTS tools were evaluated and tested
- Conclusion was that tools were either cost prohibitive or had a steep learning curve
- Decision was made to use DTIC Collaboratorium and tailor to meet specific functional requirements



Requirements

- Userid and password protection of data
- Ability to modify data using 'cut-and-paste' for easy data entry
- "Working Area" where revised documents could be held until ready for further review and comment
- Revision numbers automatically generated and retained
- Ability to enter and display a summary of changes made to the documents
- Information captured in a database for future query and analysis



Technical Environment

■ Server

- Sun Solaris 2.5.1
- Oracle 7.3.3
RDBMS
- Oracle Application
Webserver 3.0
- Enterprise Server
- Oracle PL/SQL
- Oracle SQL Plus

■ Client OS

- Windows 3.1/95
- MAC
- Netscape 3.0/4.0
- MS IE 4.0

■ Software

- Javascript
- Dynamic HTML
- Perl

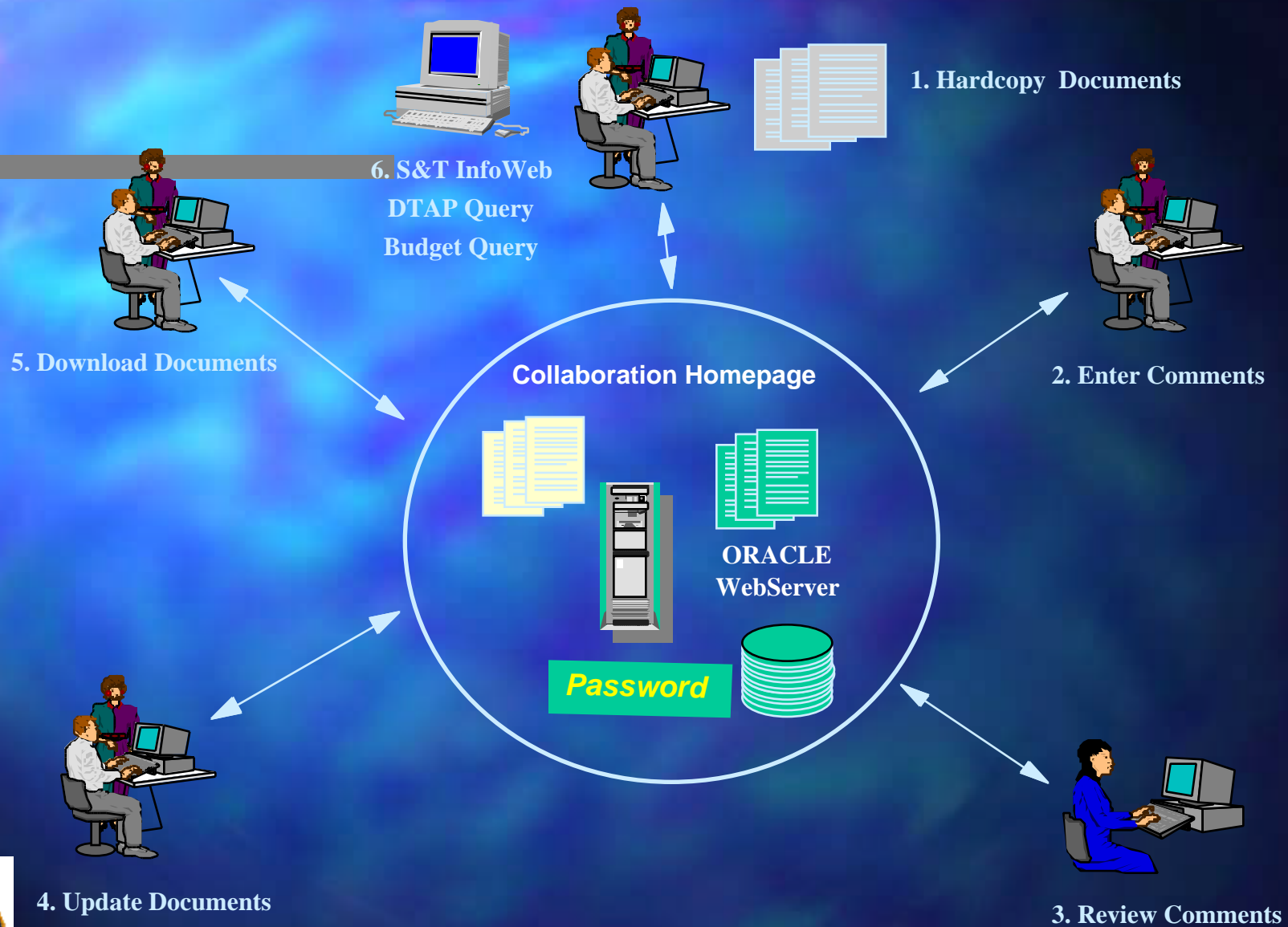


Benefits

- Provides global connectivity
- Single Centralized site where users access the latest baselined version in real-time
- Data stored in the database is available instantly for query and analysis
- As process is repeated in subsequent years, the repository of data will grow and allow for more complex trending analysis
- Data can be used for other reports



Collaborative Document Update Process



S&T Collaboration Tool

Welcome to the 1998 S&T Planning Documents Collaboration Tool!

[Comment on Documents](#)

[Panel Chair](#)

[Hints & Tips](#)

[User's Manual](#)

[What's New!](#)

[Other Sites](#)

The S&T Planning Collaboration Tool is designed to assist you in the review and revision of the 1998 S&T Planning Documents.

[Comments & Suggestions](#)

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[Download Explorer](#)

If you have any questions, please contact one of the following:

[Lorraine Williams](#) (703) 767-9129, [Marwan Mina](#) (703) 803-2466,

[Jeff Ellis](#) (703) 227-5145, or [Joanne Spriggs](#) (703) 767-9178.

Last Updated Wednesday, Oct 8, 1997 - 11:30 PM



AP.01.00 *Advanced Aerodynamic Concepts for Increased Flight Efficiency.*

Objectives. Demonstrate affordable aerodynamic technologies that provide increased cruise efficiency, increased maneuver capability, safer carrier operability and reduced weight over current fixed-wing aircraft technology, yielding increased payload/range, lower costs, and lower weights both with and without external stores. The overall objectives are to demonstrate, by FY03, a 10% increase in cruise and maneuver lift/drag (L/D), a 20% increase in landing approach lift coefficient, a 25% reduction in nozzle weight, a 50% reduction in air induction system weight, and a 30% reduction in aerodynamic design cycle time, contributing to goals of a 20% reduction in production cost, a 20% reduction in O&S cost, a 20% reduction in EMD cost, a 20% reduction in airframe weight, a 10% increase in cruise L/D, and a 20% increase in maneuverability.

Payoffs. This DTO and its preceding technology thrust have a proven record of transitioning technology to new and modified air platforms. Included in this history are air induction systems for the F-16, F-22, and both Joint Strike Fighter configurations as well as exhaust nozzles on the F-18 and F-22, powered lift on the C-17, and weapons bay improvements on the F-117. Typical payoffs include a 35% increase in aircraft range or payload, a 30% reduction in both

Name:

Organization:

Email:

Telephone:

DSN:

Comments:

Submit Comments

Reset Comments

Disposition :

Toggle:

Revision:



Query Results

Area: Air Platforms

DTO: AP0600

Revision: .01

Disposition: Incorporated

Name : D Key

Date : 08-15-1997 13:03:45

Org : AFDD

Email : dkey@mail.arc.nasa.gov

Telephone : 650604 5839

DSN :

Comments : Change 10% agility/maneuverability to: 55% increse in usable agility and maneuverability... 3rd lines of Objectives 2nd line of Payoffs

Area: Air Platforms

DTO: AP0600

Revision: .01

Disposition: Incorporated

Name : Dan Sabo

Date : 08-13-1997 13:47:43

Org : AMCOM/DAS

Email : sabod@AVRDEC.stl.army.mil

Telephone : (314) 263-0367

DSN : 693-0367

Comments : Under Challenges: Change "ex-ploit" to "exploit" Change "sys-tem" to "system" This is also a test to see when the Subpanel chair password is used.



AP.01.00

Advanced Aerodynamic Concepts for Increased Flight Efficiency

Objective.

Demonstrate affordable aerodynamic technologies that provide increased cruise efficiency, increased maneuver capability, safer carrier operability and reduced weight over current fixed-wing aircraft technology, yielding increased payload/range, lower costs, and lower weights both with and without external stores. The overall objectives are to demonstrate, by FY03, a 10% increase in cruise and maneuver lift/drag (L/D), a 20% increase in landing approach lift coefficient, a 25% reduction in nozzle weight, a 50% reduction in air induction system weight, and a 30% reduction in aerodynamic design cycle time, contributing to goals of a 20% reduction in production cost, a 20% reduction in O&S cost, a 20% reduction in EMD cost, a 20% reduction in airframe weight, a 10%

Payoffs.

This DTO and its preceding technology thrust have a proven record of transitioning technology to new and modified air platforms. Included in this history are air induction systems for the F-16, F-22, and both Joint Strike Fighter configurations as well as exhaust nozzles on the F-18 and F-22, powered lift on the C-17, and weapons bay improvements on the F-117. Typical payoffs include a 35% increase in aircraft range or payload, a 30% reduction in both

Approved Comments for AP0100

Name:

Submit Dispositions

Submit DTO

Back To:

DTO Selection

Panel Chair Functions

Collaboration Top



Air Platforms

- AP.01.00 Advanced Aerodynamic Concepts for Increased Flight Efficiency
- AP.02.00 Fixed-Wing Vehicle Structures Technology
- AP.03.00 Aircraft Support/Sustainment Reduction
- AP.04.00 Flight Control Technology for Affordable Global Reach/Power
- AP.05.00 Maturity Demonstration of Advanced Fixed-Wing Vehicle Technologies
- AP.06.00 Helicopter Active Control Technology
- AP.07.00 Demonstration of Advanced Rotor Concepts
- AP.08.00 Fighter/Attack/Strike Propulsion
- AP.09.00 Transport/Patrol/Helicopter Propulsion
- AP.10.00 Cruise Missile/Expendable Propulsion
- AP.11.00 Aircraft Power (MEA)
- AP.12.00 Rotorcraft Drive
- AP.13.00 Affordable/Supportable Fixed-Wing Vehicle Subsystems Technology
- AP.14.00 Rotary-Wing Vehicle Structures Technology
- AP.15.00 Affordable/Supportable Rotary-Wing Vehicle Subsystems Technologies
- AP.16.00 Rotary-Wing Vehicle Signature Reduction Technologies
- AP.17.00 Hydrocarbon Scramjet Missile Propulsion
- AP.18.00 Improved JP-8 Fuel
- AP.19.00 High Heat Sink Fuels (JP-900/Endothermic)
- AP.20.00 DARPA Micro Air Vehicles Program

AP.01.00 *Advanced Aerodynamic Concepts for Increased Flight Efficiency.*





Queries & Charts

**Comments &
Suggestions**

What's New!

FAQ

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S&T InfoWeb

This site provides the authoritative source for DoD Science & Technology (S&T) information. Authorized users can view S&T Documents, query select S&T databases, and update information online. This site is sponsored by the Director, Defense Research & Engineering.

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(Click on buttons below to proceed)

Planning Information

Information from the JWSTP, DTAP, BRP, and their related DTOs.

Lab Management

Lab management.

Budget Information

The President's Budget, POM, BES, & Historical Data.

Manpower & Personnel

Manpower and Personnel.

Congressional Information

Links to Congressional Web Sites



Query 1996 DTAP Funding by Service

Source: 1996 DTAP Document

Select Service: A. Department of the Army

Select one or more Funding Areas:

- ☒ (6.1) Basic Research
- ☒ (6.2) Exploratory Development
- ☒ (6.3) Advanced Technology Development

Select ONE Category Type and its Corresponding Category Element:

Category Type

Category Element

- ☒ By Area Air Platforms
- ☐ By SubArea Acoustic Magnetic Seismic Sensors
- ☐ By DTO AP.01.03.NF - Fighter/Attack Aircraft Techno

Submit Query



1996 DTAP Area Air Platforms Funding Department of the Army

Source: 1996 DTAP Document
Dollar Amounts in Millions

FY:	1996	1997	1998	1999	2000	2001
Funding Area 6.1:	0	0	0	0	0	0
Funding Area 6.2:	3.7	4.4	2.7	2.3	2.2	2.4
Funding Area 6.3:	8.5	9.8	11.1	19.1	24.2	16.1
Funding Total:	12.2	14.2	13.8	21.4	26.4	18.5

SubArea Funding



Historical Budget Data

(FY 1962 - 1995)

Source: Historical Budget

Fiscal Year

- ☐ Single FY
- ☒ Range FY to FY
- ☐ Compare FY vs. FY

1996-2003 figures are from the 1998 President's Budget Request (PBR)

Funding Type

- ☐ 6.1 Basic Research
- ☐ 6.2 Applied Research
- ☐ Technology Base (6.1 + 6.2)
- ☐ 6.3 Advanced Technology Development
- ☒ Total (6.1 + 6.2 + 6.3)

Dollar Type

- ☒ Constant
- ☐ Then Year

(Const \$'s are computed with 1998 factors)

Totals

- ☒ DoD
- ☐ Service
- ☐ Agency

Select DoD for a sum of all services and agencies,

Select Service for a sum of all services, and

Select Agency for a sum of all agencies

Service

- ☐ Army
- ☐ Navy
- ☐ Air Force
- ☐ All

Agency

- ☐ Office of the Secretary of Defense
- ☐ Defense Advanced Research Projects Agency
- ☐ Ballistic Missile Defense Organization
- ☐ Defense Special Weapons Agency
- ☐ Chemical and Biological Defense Program
- ☐ Defense Logistics Agency
- ☐ Defense Information Systems Agency
- ☐ National Security Agency
- ☐ All

Submit Query

Reset



Historical Budget

Source: Historical Budget
Dollar Amounts in Millions
Constant Dollars

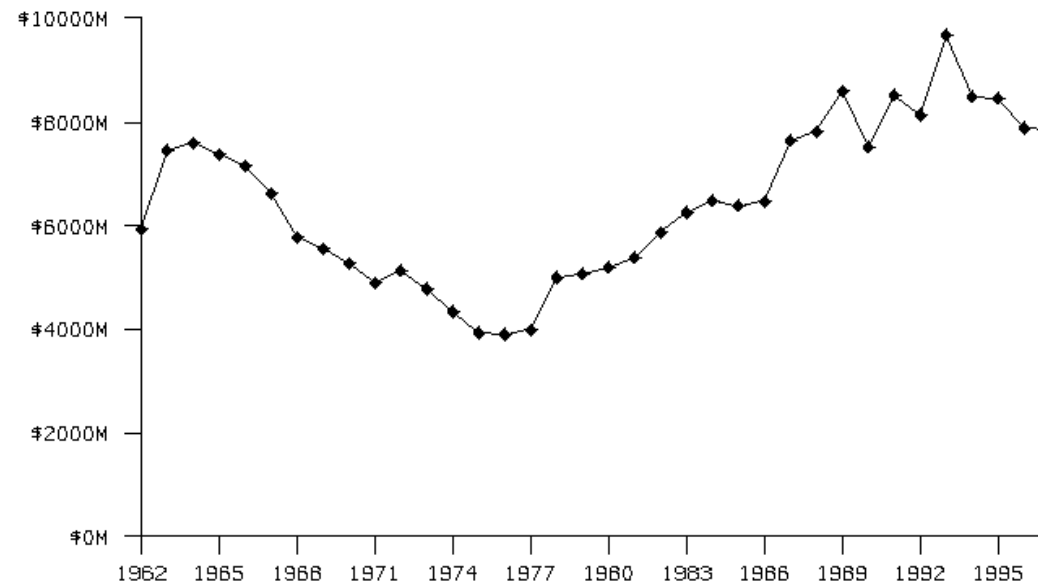


Table Data

Series	Category	Funding Type	1962	1963	1964	1965	1966	1967	1968	1969	1970
◆	DoD Total	Total	5,922	7,455	7,583	7,363	7,150	6,619	5,771	5,553	5,267
Series	Category	Funding Type	1971	1972	1973	1974	1975	1976	1977	1978	1979
◆	DoD Total	Total	4,895	5,132	4,775	4,338	3,927	3,904	3,989	4,998	5,068
Series	Category	Funding Type	1980	1981	1982	1983	1984	1985	1986	1987	1988
◆	DoD Total	Total	5,189	5,383	5,867	6,250	6,473	6,383	6,460	7,633	7,808
Series	Category	Funding Type	1989	1990	1991	1992	1993	1994	1995	1996	1997
◆	DoD Total	Total	8,592	7,516	8,510	8,129	9,675	8,489	8,449	7,877	7,855

